

REMARKS

The Office Action mailed April 01, 2003, has been carefully reviewed. The amendments made as directed above are in response thereto.

Claims 1 to 9, the pending claims in the application are all currently amended.

Claim 1 stands rejected under 35 U.S.C § 112 first paragraph as allegedly containing subject matter not described in the specification in such a way as to enable one skilled in the art to which it pertains to make and use the invention.

Claims 1-9 stand rejected under 35 U.S.C. § 112 second paragraph as allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as their invention.

Claims 1, 2, 4, and 6 stand rejected under 35 U.S.C. § 102(b) as allegedly anticipated by or, in the alternative as obvious under 35 U.S.C. § 103(a) over Scholz et al., U.S. 5,512,354.

Claim 3 and 7 also stand rejected as allegedly obvious under 35 U.S.C. § 103(a) over Scholz et al., U.S. 5,512,354.

In the Office Action, the Examiner required a substitute specification in proper idiomatic English and in compliance with 37 C.F.R. § 1.52(a) and (b). In response, Applicants have made a thorough review of the specification, the abstract and the claims to ensure that the entire Application is presented in proper idiomatic English. The foregoing amendments to the abstract, specification and claims are necessitated in part, by Applicants' attempt to put them in proper English. No new matter is believed to have been added. It is believed that the Application is now in compliance with 37 C.F.R. § 1.52(a) and (b).

Also, the claims as amended herein are fully supported by the application as originally filed. Again, no new matter is believed to have been added. Reexamination, reconsideration, and

allowance of the present application are respectfully requested in view of the foregoing amendments and the following additional remarks.

Rejections Under 35 U.S.C. § 112, first paragraph

Claim 1, and claims 2 to 7 depending therefrom, stand rejected under 35 U.S.C § 112 first paragraph as allegedly containing subject matter not described in the specification in such a way as to enable one skilled in the relevant art to make and use the invention. In particular, the Examiner claimed that the specification did not disclose how warp knit fabric is constructed to have a front, rear surface and intermediate layers. Applicants respectfully disagree.

Since a person of ordinary skill in the art would know and understand how warp knit fabric is constructed to have three layers, the meaning and scope of the claim 1 is clear. As is well settled, claims need only “reasonably apprise those skilled in the art” as to their scope and be “as precise as the subject matter permits.” Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 231 USPQ 81 (Fed. Cir. 1986), *cert denied*, 480 U.S. 947 (1987). Thus, “if the claims read in light of the specification reasonably apprise those skilled in the art of the scope of the invention, section 112 demands no more.” Credle v. Bond, 25 F.3d 1566, 30 USPQ2d 1911 (Fed. Cir. 1994).

The present invention is not so directed as to how to construct a warp knit fabric having three layers as it is directed to the material components of those layers. It is obvious to one of skill in the art that the warp knit fabric having three layers is constructed, as commonly done in the art, by use of 3-bar knitting machine. This Application is particularly directed to such a warp knit fabric consisting of a front surface layer of ultra fine yarn, an intermediate layer of spandex and a rear surface layer of regular synthetic yarns. Because one reasonably skilled in the art

would reasonably be apprised that the warp knit fabric can be knit by means commonly known in this age-old industry, claims 1 to 7, directed to the material to be knitted is enabled. Applicants believe that one of ordinary skill in the art would arrive at the present invention by using any knitting means in the art, and by using the inventive combination of materials enablingly disclosed in the specification without undue experimentation. As such, Applicants respectfully request the withdrawal of this ground for rejection.

Rejections Under 35 U.S.C. § 112 , Second Paragraph

Claims 1-9 stand rejected under 35 U.S.C. § 112, second paragraph as allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as their invention.

Regarding claim 1, the Examiner wonders what constitutes the claimed front, rear, and intermediate layers of the warp knit. As is abundantly clear in the specification (See for example "Summary of the Invention" page 3, lines 15-20), the front layer is made of ultra fine yarn, the intermediate layer is made of spandex and the rear layer is made of regular synthetic yarns. Further, as stated above, this Application is not limited by the knitting method used. One of skill in the art is reasonably apprised of the use of three-bar knitting machine to make a three-layered knit fabric. Again, claim 1 is directed to the constituent material of the warp knit fabric and is not limited by how to fashion those materials into a knit fabric, said know how being old and notoriously well known in the art.

The Examiner further asserts that it is unclear whether Applicant is claiming a “synthetic yarn” or a “high shrinkage yarn,” and that the term “high shrinkage yarn” is not described in the specification. Applicant respectfully disagrees.

In the specification, page 6, lines 12-15, Applicants clearly state that the rear surface layer is made of synthetic yarn with monofilament denier of 1 to about 5 and that a preferred form of that synthetic yarn is either a polyester yarn or a high shrinkage yarn. The Applicants further went on in the specification, page 7, lines 1 to 3, to describe a high shrinkage yarn as one having a shrinkage rate in boiling water of 15 to about 50% wherein the stress of heat shrinkage is about 0.2g/d or more. Nevertheless, to obviate this ground for rejection, Applicants have amended claim 1 to delete the occurrence of the “high shrinkage yarn” and respectfully request that this ground for rejection be withdrawn.

With regard to claims 4, 8 and 9, the Examiner asserts the same ground for rejection in view of the alleged indefiniteness of the term “high shrinkage yarn” and whether or not the Applicants are claiming a synthetic yarn or a high shrinkage run. Applicant’s disagree and reiterate the contention mentioned above as to the definiteness of these terms. Nevertheless, to obviate this ground for rejection, Applicants have deleted the term “high shrinkage yarn” and respectfully ask that this ground for rejection be withdrawn.

The Examiner further rejected claim 8 and 9 because she did not understand the method steps of “raising”, “pre-heating”, “heating continuously”, and “buffing”. Again, as is well settled, claims need only “reasonably apprise those skilled in the art” as to their scope and be “as precise as the subject matter permits.” Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d

1367, 231 USPQ 81 (Fed. Cir. 1986), *cert denied*, 480 U.S. 947 (1987). Thus, “if the claims read in light of the specification reasonably apprise those skilled in the art of the scope of the invention, section 112 demands no more.” Credle v. Bond, 25 F.3d 1566, 30 USPQ2d 1911 (Fed. Cir. 1994).

The terms “raising” and “buffing” are terms of art and a reasonable artisan would be apprised of their meaning without further explanations. For instance, raising the warp knit is easily accomplished by passing the warp knit through a raising machine which typically has several raising rollers designed, as the name suggests, to raise fibers out of the warp knit. Similarly, buffing is accomplished by use of a buffing machine.

As for the meaning of the term “preheating” and “heating continuously,” Applicants intended to convey the notion of two stage heating and believe that they have done so in proper idiomatic English in the substitute specification and apologize for the Examiner’s difficulty in understanding them due to translational errors. The pre-heating and the final heating – deemed heating continuously are both accomplished by passing the warp knit continuously through a hot air-dryer. The desired level of heating is ascertainable by one of reasonable skill in this art without undue experimentation. For instance, the warp knit may be continuously heated in a hot air dryer for a total residence time (of any segment of the warp knit) within the dryer of about 30-50 minutes at 150-190 °C. Similarly, the final heating may also be accomplished by continuously passing the warp knit through a hot air dryer at 150-190°C for about 30-50 minutes. As these conditions are easily understandable to one of skill in the art, it is asserted that neither 35 U.S.C. § 112 first and second paragraph are violated by not including factors which can be easily figured out without undue experimentation. As such, Applicants respectfully ask that the Examiner withdraw this ground for rejection of claims 8 and 9.

With regard to claim 5, the Examiner asserts that the unit of “40-80 each/inch” does not properly convey the notion of density of a processed warp knit. Applicant agrees and apologizes for the translational error. The term “40-80 each/inch” refers to “40-80 wales and courses/inch” of the warp knit fabric and it does convey the notion of “density” as such term is used in the art, not in the scientific sense of “mass per unit volume” but in the sense of the number of yarns passing through the fabric in the wale direction and the number passing through the fabric in the course direction. Thus 40-80 wales and courses/inch refers to 40-80 wales per inch in the wale direction and 40-80 courses/inch in the course direction. As the Examiner can appreciate, the higher the number of wales and courses/inch, the more material would be used and the denser the fabric would be in terms of mass/unit volume of warp knit fabric. Applicants have amended the term “each/inch” to “wales and courses/inch” in both the claims and specifications and have thus obviated this ground for rejection and respectfully request that it be withdrawn.

With regard to the Examiner’s concern about the definiteness of the term “excellent touch” in claims 1 –9, Applicants have deleted that term and respectfully request that this ground for rejection be withdrawn. Nevertheless, Applicants assert that they can be their own lexicographer and use terms whose meaning is ascertainable by reference to the specification even if it means a departure from the plain and ordinary meaning of those terms. As detailed in page 10 of the specification, the “touch” of the fabric is a subjective assessment based on the evaluation of reasonable experts in the field.

Rejections Under 35 U.S.C. § 102/103

Claims 1, 2, 4 and 6 stand rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103 (a) as obvious over Scholz et al., U.S. 5,512,354. The Examiner asserts that Scholz et al. is directed to a knit fabric comprising a nonfiberglass microdenier yarn in combination with a heat shrinkage yarn or a stretch yarn, and alternatively a stiffness controlling yarn – said fabric made for use in orthopedic applications such as casting materials.

As is well settled, for a prior art reference to anticipate in terms of 35 U.S.C. § 102, every element of the claimed invention must be identically shown in a single reference and these elements must be arranged as in the claim under review. In re Bond, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). As the Examiner pointed out, Scholz et al. teaches that the backing layer, nonfiberglass microdenier yarns are formed from fibers or filaments having a diameter of no greater than 1.0 denier (Column 7, 1-10). On the other hand, the rear surface layer of the present invention is made of synthetic yarn with monofilament denier of 1 to about 5 denier. More particularly, whereas the front surface of Scholz et al. is made of high shrinkage yarn, that of the present invention is made of ultra fine yarn. For at least that major distinction between the present invention and the prior art, a 35 U.S.C. § 102 rejection does not apply.

In fact, the present invention is patentably different from the prior art in object, effect and constitution. The object of the present invention is to create warp knit fabrics with exquisite touch to be used in clothing and synthetic leather. On the contrary, the object of the cited prior art is to improve formability and conformability backings for orthopedic immobilization devices and its materials are reasonably adapted to that end. In fact, to ensure the impregnability of its material with resins, the fabrics of Scholz et al. are apertured and basically functions as a backing

for said immobilization devices. (Column 6, lines 30 –35). In contrast, the materials of the present invention are designed for softness, draping property, writing effect and appearance and are adapted to that end. As such, it is unreasonable for the Examiner to assert that the recovery rate of the materials of the present invention, a deficiency admittedly not taught by Scholz et al., is inherently to be assumed.

Applicants differ strongly with the Examiner in terms of the characterization of the Scholz et al.'s invention. In particular, whereas the present invention teaches a three layered knit fabric, Scholz et al. teaches a two layered fabric and further adds that an elastic stretch yarn may be knitted into the fabric under tension to provide some degree of compaction as the knit relaxes off the knitting machine. The augmentation of Scholz et al.'s two-layered material with an extensibility-imparting material is clearly not the same as a three-layered warp knit fabric. However, assuming for the sake of argument that Scholz et al. teaches a three layered warp knit fabric, which it does not, the following differences in constituent materials can be deduced.

Item	The Present Invention	Scholz et al.
The surface (front) layer	Ultra fine yarn	High Shrinkage Yarn
The Intermediate Layer	Spandex yarn	Monofilament yarn
The back (rear) layer	Synthetic yarn (1 to about 5 denier)	Microdenier yarn (less than 1.0 denier)

The differences in constitution and arrangement between Scholz et al. and the present invention are evident. Applicants have not seen any suggestion, express or implied, in Scholz et al. to suggest that the invention of claims 1, 2, 4 and 6 can be arrived at by substituting the microdenier yarn of Scholz et al. (less than 1.0 denier) with the synthetic yarn of the present

invention. In particular, the high shrinkage yarn so critical to the formability and conformability of the fabric of Scholz et al. cannot merely be replaced by the ultra fine yarn of the present invention – so critical to its touch and feel. Nor is the fabric of the present invention interspersed with apertures – the use of which is critical to Scholz et al. In fact, Scholz et al. teaches away from the touch, feel, drapability and smoothness of the fabric of the present invention and instead teaches formability and conformability which implies flexibility with some measure of rigidity that is neither contemplated nor taught by the present invention. Moreover, the fact that a prior art could be modified so as to produce a claimed device is not a basis of an obviousness rejection unless the prior art suggested the desirability of such a modification. In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). For at least the fact that Scholz et al. did not suggest the desirability of so modifying the constituent elements of their invention to arrive at the present invention, Applicants contend that their invention is patentably unobvious over Scholz et al. Applicants respectfully request the withdrawal of this ground for rejection.

Rejections Under 35 U.S.C. § 103

Claims 3 and 7, both dependent on claim 1, stand rejected as obvious over Scholz et al. Since, as has been discussed above, independent claim 1 is patentably unobvious over Scholz et al., these rejection are now moot. Applicants respectfully request their withdrawal.

CONCLUSION


In view of the foregoing remarks, Applicants submit that there is no basis for applying the previous rejections to the pending claims and withdrawal of the rejections is respectfully

requested. The claims are believed to be in condition for allowance, and Applicant earnestly solicits from the Examiner early notification of allowability.

Should the Examiner have any questions or believe a personal or telephonic interview may be in order, he is invited to contact the undersigned at his earliest convenience.

Respectfully submitted,

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